

**[SYSTEM FOR IN-SITU
GENERATION OF FLUORINE
RADICALS AND/OR FLUORINE-
CONTAINING INTERHALOGEN
(XF_n) COMPOUNDS FOR USE IN
CLEANING SEMICONDUCTOR
PROCESSING CHAMBERS]**

Abstract of Disclosure

ABSTRACT OF THE DISCLOSURE A system for *in-situ* generation of fluorine radicals and/or fluorine-containing interhalogen compounds XF_n (wherein X is Cl, Br, or I, and n is an odd integer). Such system comprises a fluorine source, a halogen source for supplying halogen species other than fluorine, a chamber for mixing fluorine with halogen species other than fluorine, and an energy source to supply energy to such chamber to facilitate reaction between fluorine and the halogen species other than fluorine. The chamber may be a semiconductor processing chamber, wherein the *in situ* generated fluorine radicals and/or fluorine-containing interhalogens are employed for cleaning the processing chamber.

Figures